Secl. H-27—100,000—23-5-46.

Development (1947) Department.

MS SERIES.

G.O. No. 3301

Dated 3-12-47

[Despatch Abstract.]

Agri. - I.C.A.R. - Entomology Committee meeting - Asstt. Entomologist, Coimbatore - Permitted to attend.

GOVERNMENT OF MADRAS
Abstract.

Agriculture - Indian Council of Agricultural Resrearch - Entomology Committee meeting - Government Entomologist, Coimbatore - Permitted to attend.

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Development Department

G.O.Ms.No.5581 Dated 3-12-1947.

READ:-

G.O.Ms.No.4381, Development, dt. 6-9-1947.
From the Director of Agriculture,
No.D.3.972/47, dated 28-11-1947.

ORDER:

His Excellency the Governor of Madras permits the Government Entomologist, Coimbatore, to attend the meeting of the Entomology Committee of the Indian Council of Agricultural Research, to be held at New Delhi on 9th and 10-the December 1947.

(By Order of His Excellency the Governor)

x x x

Secy. to Government.

To the Director of Agriculture.
The Accountant General
Copy to the Indian Council of Agricultural Research.

Copy of letter No.D.Dis. D.972/47 dated 10-1-48 from the Director of Agriculture, Madras to the Secretary to Government Development Department, Madras.

Sub: Agriculture - Indian Council of Agricultural Research - Entomological Committee meeting on 9th-10th December 1947 - Report of the Government Entomologist - Submitted.

Ref: G,O.Ms.No. 5581, Development, dated 3-12-1947.

I enclose a report on the proceedings of the above meeting submitted by the Government Entomologist who attended that meeting.

Sd. M.Kanthiraj,
for Director of Agriculture.

/true copy/forwarded/by order

Sd. x x
Gazetted Assistant.

Development Department.

TO A.S.

Please see the report of the Govt. Entomologist on pp.3-11 below on the proceedings of the Entomological Committee of the I.C.A.R.

The papers may be lodged and added to the previous papers at (N)

Sd. x x 2-1-48.

PROCEEDINGS OF THE ENTOMOLOGICAL COMMITTEE MEETING HELD ON 9TH & 10TH DEC. '47 AT NEW DELHI.

PRESENT: Dr. H.S.Pruthi, Plant protection Adviser to the Govt. of India.
Dr.K.N.Trehan, Entomologist, Bombay.
Dr.K.B.Lal, " United Provinces.
Dr.E.S.Narayanan, Head of the Division of Entomology, Indian Agrl.Research Inst.
Rao Banadur Y.Ramachnadra Rao, Deputy Director of Plant Quarantine.
Mr. R.N.Muttoo, Bee expert.
Mr. C.R.Thompson, do.
Mr. S.R.Sontakay, Director of Storage, Food Dept.
Mr. V.D.Thavani, Senior Statistician, Indian Council of Agricultural Research.
Mr. M.C.Cherian, Govt. Entomologist & Vice Prl. Coimbatore.

AGENDA:

1. ENTOMOLOGY SECTION REPORT 1946-47-INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI: This report was not read and hence it was not discussed.

2. PADDY INSECT PEST REPORT 1946-47 - BENGAL:

3. PADDY INSECT PEST SCHEME- TECHNICAL PROGRAMME: BENGAL: These two were discussed along with item No.31 viz., Coordinated scheme of research on insect pests of rice'

4. INSECT PESTS OF STORED JOWAR-REPORT FOR 1946-47, INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI:

5. PESTS OF STORED PULSES: REPORT FOR 1946-47, INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI: These two were taken up for discussion together. The Committee felt (1), that items 4 and 5 can be combined into one scheme, (2) that the study of the influence of ventilation on pest infestation was not done critically so as to obtain reliable results and (3) that it was necessary to study the efficacy of only 2 fumigants that is Methyl bromide and Ethylene-di-chloride. In the course of discussion I gave an account of the results of the trials carried out previously at Coimbatore with the different fumigants and DDT against pests of stored jowar and pulses.

6. GRAM POSTS- FINAL REPORT--CENTRAL PROVINCES: As the report was not received it was not discussed.

7. INSECT PESTS OF STORES GROUNDNUTS--ABSTRACT OF PRACTICAL RESULTS--MADRAS: This scheme was for a period of one year from 8th November '43. The final report was already submitted. It contained an account of the various pests of stored groundnuts and their control. The Chairman stated that a short account of the results of these studies may be published.

8. PESTS AND DISEASES OF GROUNDNUTS: REPORT FOR 46-47-MADRAS: I explained the results of the control experiments against groundnut sural and stated that use of light traps, dusting of DDT and dusting of 666 were effective against the pest. The committee suggested that a note should be prepared for publication in Indian Farming.

9. PESTS AND DISEASES OF TIL--REPORT FOR 1946-47--UNITED PROVINCES: The Entomologist, United Province, gave a short account of the work done. It was found that DDT and 666 gave good results against Antigastra caterpillars. Since different proprietory products of DDT and 666 are received the committee made a general

general recommendation to all Entomologists that the actual strength of the ingredients should also be stated.

10. PESTS AND DISEASES OS BRASSICAE: Report for 1946-47-PUNJAB: The report was not received and hence there was no discussion.

11. PESTS AND DISEASES OF LINSEED--REPORT FOR 1946-47-CENTRAL PROVINCES: The Entomological portion of the report was discussed and adopted. The Committee considered that the term 'day-light traps' occurring on page 4 was confusing and that it was better to use the word 'Chemptrophism' instead.

12. PESTS AND DISEASES OF CASTOR--REPORT FOR 1946-47--HYDERABAD: The report was not received for discussion.

13. PESTS AND DISEASES OF SAFFLOWER: REPORT FOR 1946-47-BOMBAY:

14: PESTS AND DISEASES OF SAFFLOWER--TECHNICAL PROGRAMME-BOMBAY: Nos. 13 and 14 were discussed together. The scheme is to come to a close in April 1948. The committee were of the opinion that the next few months of the scheme should be utilised for the study of the actual amount of loss to the drop due to aphis--Macrosiphum jaceace.

15. STORAGE OF GROUNDNUTS--REPORT FOR 46-47--MADRAS: The entomological aspect of the scheme was explained by me. The committee thought that it would be useful if an article on storage of groundnuts is published for the information of the general public.

16. STORAGE OF GROUNDNUTS--REPORT FOR 1946-47 -- PACHORA: There was nothing of Entomological interest in the report and the committee had no remarks to offer.

17. HORTICULTURE--REPORT FOR 1946-47--UNITED PROVINCES: The report was not available for discussion.

18. HORTICULTURE--REPORT FOR 1946-47--CENTRAL PROVINCES AND BERAR:

19. HORTICULTURE--EXTENSION--CENTRAL PROVINCES AND BERAR: The Entomological portions of items 18 and 19 were discussed together. The committee were of the opinion that since all the four pests mentioned are well-known and a good deal of literature existed on these, the work of the scheme should be reorientated, laying emphasis on control methods. I gave an account of the remedial measures recommended in our Presidency against two of the pests--Citrus leaft miner and fruit sucking moth.

20. HORTICULTURE--REPORT FOR 1946-47--ASSAM: Since there was no entomological work done under the scheme the committee did not offer any remarks.

21. HORTICULTURE--TECHNICAL PROGRAMME-ASSAM: This was not received and hence there was no discussion.

22. HORTICULTURE--REPORT FOR 1946-47--MYSORE: This was not ready.

23. ENTOMOLOGICAL AND MYCOLOGICAL STAFF FOR FRUIT RESEARCH: MADRAS: This scheme was put up by the Fruit Specialist. I explained the necessity for the staff and also the different aspects of study proposed to be taken up at Kodur.. The Committee approved the scheme. They were, however, of the opinion that considering the importance of the fruit industry and the variety of pests to be tackled the staff proposed was inadequate and atleast two more fieldmen should be appointed.

24. ORANGE CULTIVATION--REPORT FOR 1946-47--COORG: There were no remarks except that the scientific names of the pests should be given in the report.

25. INSECT PESTS OF FRUITS--REPORT FOR 1946-47-UNITED PROVINCES: The question of damage by the mango leaf gall found in the different provinces was discussed. I stated that in Madras these were not pests of any importance. This was the case in most of the Provinces. It was decided that before elaborate research work is undertaken on the leaf gall formations the amount of the damage due to these pests should be studied. The committee were of the opinion that in the case of the other three pests--citrus leaft-miner, fruit sucking moth and the pomegranate butterfly--more prominence should be given to the study of control methods. The effect of treatment with DDT and 666 on pollinating insects such as bees and also on parasites should be studied.

26. POTATO STORAGE PESTS--REPORT FOR 46-47--BIHAR: It was stated in the report that a cover of sand and garlic or onion was effective against the potato tuber moth. To what extent the two components are responsible in keeping away the moths should be studied. In other Provinces including Madras, storage under sand was also effective. The committee felt that the experiment should be carried out more critically. They were also of the opinion that before taking up cultural methods it will be useful to ascertain definitely the infestation of the pest in the field. Petrol fumigation which is said to be useful in Bombay should also be tried.

27. SCHEME OF SCIENTIFIC AID TO CARDAMOM INDUSTRY--REPORT FOR 1946-47--MADRAS: I explained the entomological portion of report and mentioned that of the various insecticides tried against the cardamom thrips, spraying of nicotine sulphate and dusting of gammexane were the most effective. The report was approved.

28. SAN JOSE SCALE SURVEY--NEW SCHEME--KASHMIR: The new scheme was not recommended but the committee were of the opinion that an article on the results so far achieved may be published in the Indian Farming.

29. INSECT PESTS OF STORED CEREALS--REPORT FOR 46-47-PUNJAB: The report was not ready.

30. BREEDING OF RODOLIA CARDINALIS--REPORT FOR 1946-47-MADRAS: A summary of the work done during the year was explained by me. The two important aspects were the breeding and liberation of the predator--Rodolia cardinalis--to control the fluted scale-Icerya purchasi--in the Nilgiris and Kodaikanals and also the plant quarantine work at Mettupalayam and Shembaganur for interception of notified plants and plant products likely to carry the scale on their way to the plains. The report was approved.

31. RESEARCH ON INSECT PESTS OF RICE-CORRDINATED SCHEME-DIFFERENT PROVINCES--Mr.K.Ramiah, Director, Central Rice Research Institute, Cuttack who was present when the subject was discussed wished to know what aspects of study should be undertaken at his Institute. The committee recommended the following: (a) determination of accurate method of extent of incidence of pests and losses to the crop (b) factors responsible for relative resistance, if any, of pests, (c) ecological factors with regard to incidence of pests and (d) collection of information on pests and their natural enemies in the different provinces in India. The Committee also recommended the schemes put up by United Provinces, Central Provinces and Berar,

Orissa, Mysore, Assam and Bengal. In the case of the latter two provinces the scheme should be worked only if there are qualified Entomologists. The Government of Madrad did not put up a scheme as they contemplated expasion of their Entomological section which would take up the study of rice pests. The chairman stated that the programme of work in progress in Madras should also be made available for proper coordination of the work in different provinces.

32 & 33. FUMIGATION TECHNIQUE SCHEME FOR IMPORTED FRUITS-INDIAN AGRICULTURAL RESEARCH INSTITUTE--NEW DELHI--AND A NOTE ON THE SAME BY THE SECRETARY, INDIAN COUNCIL OF AGRICULTURAL RESEARCH:- The scheme is for standardising a technique for fumigating fruits such as apples with Methyl bromide against the codling moth. The committee did not recommend the extension of the scheme beyond 1948. The remaining months of the scheme should be devoted forwriting a detailed report of the work already done.

34. TESTS WITH DDT AND 666--REPORTS---MADRAS & BOMBAY: I gave an account of the results of the trials with these insecticides against the cholam earhead bug (Calocoris angustatus) and the cotton bollworms. The Bombay Entomolgogist explained the work done by his staff. The scheme had not been started in United Provinces and at the Indian Agricultural Research Institute, New Delhi. The committee were of the opinion that in view of the intricate work involved, the Assistant in charge of the scheme should be an experienced officer, recruited at Rs.200/- per mensem, the initial salary recommended by the Committee previously.

35.& 36. SCHOOLS OF RESEARCH IN ENTOMOLOGY AND A NOTE BY THE SECRETARY, INDIAN COUNCIL OF AGRICULTURAL RESEARCH: DIFFERENT PROVINCES INCLUDING MADRAS: I stated that a Research fellow has been appointed for the study of Braconidae and another is to be appointed for the study of Thysanoptera. Similarly, work has been taken up at Indian Agricultural Research Institute, on Isoptera, Ichneumonidae and Diptera of Agricultural importance. The committee reiterated the recommendation of the Entomlogical conference that 'schools of research' should be established wherever Entomologists have already specialised to some extent on the particular groups of insects and that Research fellows are appointed to assist the experts in the subjects concerned. In allocating further schools of research, studies on insect anatomy, morphology and physiology may be taken up by the Universities, insect taxonomy at Institutes where specialists and collections are available and biology and control of pests by the Agricultural Departments. It was agreed that work on Braconidae which was taken up by Madras recently may be transferred to the United Provinces and the Research fellow already appointed be given another subject for study namely 'Biology of Thysanoptera of economic importance'.

37. ALL INDIA BEEKEEPING RESEARCH STATION--REPORT FOR 1946-47--PUNJAB: The report was not available.

38. PROPOSAL FOR THE ESTABLISHMENT OF A CENTRAL BEE-RESEARCH STATION--A NOTE BY THE SECRETARY, INDIAN COUNCIL OF AGRICULTURAL RESEARCH: I stated that in the scheme prepared there was not any mention of the valuable work done on bee-keeping at Coimbatore. Further I stressed the need for two central stations one for North India and the other for South India at Coimbatore. The scheme was discussed in detail. Now that Lyalpur, the headquarters of the All-India beekeeping research station is in Pakistan, the Committee felt that a station should be established in the United Provinces. Further since one station would not serve the whole of India with their different flora and climatic conditions a similar station for South India could be located at Coimbatore where

where work on beekpeping has been in progress. These two main stations should have some regional stations like the one approved for Travancore.

39. SCHEME OF RESEARCH ON TERMITES--FOREST RESEARCH INSTITUTE AND INDIAN AGRICULTURAL RESEARCH INSTITUTE: After some discussion the committee agreed (1) that there should be two schemes one for the Forest Research Institute and the other for the Indian Agricultural Research Institute with close collaboration between the two, (2) that if two men are sent abroad for training one should be trained as a Taxonomist and the other as a Biologist, (3) that the period of training of the Taxonomist be 18 months and that of the Biologist 12 months and (4) that Madras, United Provinces, and Bihar be provided with staff for the study of ~~termites~~ termites in their area.

Sd. x x x
Government Entomologist
& Vice Principal.

Office Assistant,
Madras Record Office.